

### **ABSTRACT OF THE DISCLOSURE**

The circulative cooling apparatus has a first chamber, a second chamber, a first pipe, and a second pipe. There are porous structures on internal walls of the first chamber and the second pipe. There is work fluid in the second  
5 chamber and the porous structures. The work fluid is evaporated by heat in the first chamber, and owing to the pressure drop the vapor of the work fluid moves to the second chamber through the first pipe. Then the vapor of the work fluid condenses into the work fluid in the second chamber. Afterward the work fluid is transported back to the first chamber through the second pipe  
10 using the porous structures thereof, thus forming a circulative cooling apparatus.